## **Pyrazolopyrimidines**

## Abstract

New pyrazolopyrimidines of the formula

in which

R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, X and Hal have the meanings specified in the description,

multiple methods for producing these materials and their use for combating undesired microorganisms.

New intermediate products of the formulas

and

$$R^{16}$$

N

COOR<sup>12</sup>

COOR<sup>12</sup>

(XII-b)

and methods for producing these materials.